

A Report of the Liver Disease Subcommittee of the Digestive Diseases Interagency Coordinating Committee

Action Plan for Liver Disease Research



US Department of Health and Human Services
National Institutes of Health

**A Report of the Liver Disease
Subcommittee of the Digestive Diseases
Interagency Coordinating Committee**

*Action Plan for Liver
Disease Research*

US Department of Health and Human Services
National Institutes of Health

NIH Publication No. 04-5491
December 2004

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
INTRODUCTION	
Introduction	9
Liver Disease: Overview and Current Burden	11
Overview of Diseases of the Liver and Biliary Tract	11
Current Burden in the United States	12
<i>Prevalence and Incidence of Liver and Biliary Diseases.</i>	12
<i>Mortality from Liver and Biliary Diseases.</i>	17
<i>Economic Costs to the U.S. Health Care System.</i>	20
<i>Quality of Life</i>	20
Liver Disease Research	21
Advances and Opportunities.....	21
Overview of Current NIH Funding of Liver Disease Research.....	23
Action Plan	25
Development and Organization.....	25
Guiding Principles	27
CHAPTERS	
1. Cell and Molecular Biology of the Liver.....	31
2. Liver Injury, Inflammation, Repair, and Fibrosis	39
3. Developmental Biology and Regeneration	45
4. Bile, Bilirubin, and Cholestasis	53
5. Viral Hepatitis.	61
6. HIV and Liver Disease	71
7. Fatty Liver Disease	79
8. Drug- and Toxicant-Induced Liver Disease.....	87
9. Autoimmune Liver Disease.....	95
10. Pediatric Liver Disease	101

11. Genetic Liver Disease	109
12. Liver Transplantation	119
13. Complications of Liver Disease	129
14. Liver Cancer	137
15. Gallbladder and Biliary Disease	145
16. Liver Imaging and Biotechnology	153

CONCLUSION

Implementation and Assessment	161
Summary Recommendations	165

APPENDICES

Appendix A: Action Plan Participants	171
Part 1. Liver Disease Subcommittee and DDICC Membership	171
Part 2. Working Group and Primary Review Group Membership	173
Part 3. NIDDK Staff	180
Appendix B: References for Epidemiologic Data	181
Appendix C: Acronyms	183
INDEX	187